

The following marked-up version of the Claims pursuant to 37 C.F.R. § 1.121 (c)(ii) with instructions and markings showing changes made herein to the previous version of the Claims on Record. Underlining denotes added text while strikeout denotes deleted text.

Listing of the claims

1. (canceled)

2. (canceled)

3. (currently amended) A process for producing glucose from starch comprising the acts of:

a) providing a mixture of a starch slurry having a pH as low as 3.0;

b) ~~and~~ adding an thermostable, acid-stable alpha-amylase capable of hydrolyzing starch at a pH as low as 3.0, the alpha-amylase cultured from *Bacillus acidocaldarius*;

cb) liquefying the starch slurry by heating the mixture until a DE of about 10-12 is reached within 60 to 90 minutes after the addition of the alpha amylase without the production of maltulose; and

de) adding a saccharification enzyme to the liquefied starch slurry from step c b) and maintaining a resulting saccharification mixture at about 60° C for between about 10-48 hours or until about a 95% glucose yield is achieved.

4. (original) The process of claim 3 wherein act a) is carried out without adjusting the pH of the starch slurry.

5. (original) The process of claim 3 wherein act a) is carried out without adding a calcium salt.

6. (original) The process of claim 3 wherein act a) is carried out without adjusting the pH of the starch slurry and without adding a calcium salt.

7. (original) The process of claim 4 wherein act b) further comprises heating the mixture at about 105-110° C for 5-8 minutes.

8. (original) The process of claim 7 wherein act c) is carried out without inactivating the alpha-amylase and without adjusting the pH of the liquefied starch slurry.

9. (original) The process of claim 8 wherein act c) further comprises adding glucoamylase to the liquefied starch slurry.

10. (original) The process of claim 8 wherein act c) further comprises adding a mixture of glucoamylase and pullulanase to the liquefied starch slurry.

11. (canceled) A product produced by the process of claim 8.

12. (new) The process of claim 3 wherein the pH as low as 3.0 is a pH between about 4.0 and 4.5.
